

Application No.: 09/868581
Amendment dated: June 14, 2004
Reply to Office action of February 13, 2004

REMARKS/ARGUMENTS

The specification has been amended to meet the objections in paragraph 2 of the Official action. In addition, for improved clarity in the paragraph at the top of page 22, "41" and "lower" have been moved.

The claims presented herein are numbered in accordance with the Examiner's renumbering. Dependency has been modified where required by the renumbering of the claims.

Claim 41, which was rejected because it was dependent on previously cancelled claims, has now been cancelled.

Claims 58, 60, 61, 63, 66, 72, 75, 77, 78 and 80, which were found allowable, have been rewritten in independent form. Claims 73 and 76, which were also found allowable, are dependent on claims 72 and 75 respectively, and have not been rewritten in independent form.

To address the rejection of claims 52 and 53 under 35 U.S.C. §112, claim 51 has been amended to recite that one or more additives, and/or modifiers, are "included in, rather than "introduced into" the mixture.

The language "suitable for performing a process as claimed in claim 1" has been replaced by "for the production of particles of a material" where the language of claim 70 is incorporated into claims 72, 75, 77, 78 and 80.

In one embodiment of the invention, as described on page 11, lines 5-11, the "pressure and temperature of the mixture. . . in the conduit are maintained by means of the dimensions of the conduit being such as to generate a back pressure in part of all of the conduit. . .," and the "length of the conduit should be such that the residence time of the mixture in the conduit is such that particle formation occurs in the conduit." Claim 1 has been amended accordingly, to specify

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both these features by reciting that "a back pressure is generated in at least part of the conduit" and that "the conduit is sufficiently long that the residence time of the mixture in the conduit is such that particle formation occurs in the conduit."

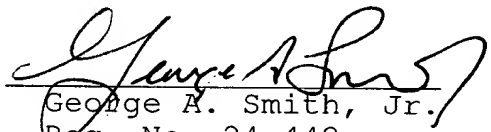
In WO 95/01221, the distance between the tip of the inner coaxial passage and the tip of the outer coaxial passage is short, as can be seen from FIG. 3, and, as explained at page 22, line 31 to page 23, line 10, the fluids emerge from the end of the outer passage 41 and break into droplets. The vehicle is extracted from the droplets substantially simultaneously with their formation, and the formation of particles takes place as a result of extraction of the vehicle by the supercritical fluid. Thus, in WO 95/01221, the particles are formed outside the nozzle tip. In contrast, Applicants' claim 1 specifically sets forth that particle formation occurs in the conduit, a step neither shown in, nor suggested by WO 95/01221 or elsewhere in the art of record.

In WO 98/36825, as in WO 95/01221, particle formation takes place at the nozzle tip by virtue of extraction of vehicle from droplets by a supercritical fluid. Some particle formation is said to take place in the passage 32 (See FIG. 2 of WO 98/36825. However, there does not appear to be any indication of a back pressure in WO 98/36825 "whereby the pressure and temperature of the mixture in the conduit are such that the compressible fluid antisolvent substance remains in a compressed state over at least part of the length of the conduit" as set forth in claim 1, as amended. Reconsideration of claim 1, and allowance of claim 1 and its dependent claims are therefore requested.

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Claim 62 has been rewritten in independent form by incorporation of the limitations of its parent claim, claim 59. Reconsideration of the rejection of claim 62 is requested because the prior art of record does not appear to teach the concept of introducing a flow control fluid upstream of a restriction, at a pressure at least as high as the pressure of the mixture in the conduit upstream of the restriction. The applicants therefore also request reconsideration of the rejection of claim 62.

Respectfully submitted,
HOWSON & HOWSON

By 
George A. Smith, Jr.
Reg. No. 24,442
Howson & Howson
Box 457
Spring House, PA 19477
Telephone: 215 540 9200
Facsimile: 215 540 5818

Enclosures:

- (a) Extension request
- (b) Extension fee
- (c) Associate power of attorney
- (d) Check for added independent claims